

(56,216; M3-1(73)-12

A UNITED STATES
DEPARTMENT OF
COMMERCE
PUBLICATION



CURRENT INDUSTRIAL REPORTS

Manufacturers' Shipments, Inventories, and Orders

December 1973



U. S. DEPARTMENT OF COMMERCE • Social and Economic Statistics Administration • BUREAU OF THE CENSUS

FOR RELEASE: January 31, 1974 2:00 P.M.

SERIES: M3-1(73)-12

SUMMARY

New orders for manufactured products in December decreased \$2.78 billion or 3.5 percent to \$76.66 billion from \$79.44 billion in November after seasonal adjustment. Shipments decreased \$1.47 billion or 1.9 percent to \$75.55 billion from \$77.02 billion in November. Unfilled orders increased \$1.11 billion or 1.0 percent to \$115.44 billion at the end of December. Manufacturers' inventories increased \$2.16 billion or 1.8 percent to \$120.59 billion at the end of December. The inventories to shipments ratio increased from 1.54 to 1.60.

For the 3 months ending in December, the average month to month change in new orders increased 0.7 percent compared with a 0.1 percent decrease for the 3 months ending in September and a 1.2 percent increase for the 3 months ending in June.

NEW ORDERS

New orders for durable goods decreased \$2.95 billion or 6.6 percent in December primarily due to decreases in motor vehicles and parts¹ (\$1.13 billion), aerospace industries (\$585 million) and shipbuilding and railroad equipment industries (\$680 million). Exclusive of the transportation industries, new orders in December for durable goods declined \$505 million or 1.5 percent.

SHIPMENTS

Shipments of durable goods decreased \$1.58 billion or 3.8 percent to \$40.32 billion in December. Virtually all of this decrease was attributable to the motor vehicles and parts industry (\$1.25

¹It should be noted that new orders for the motor vehicles industry are not reported as such but are estimated as equal to shipments. Hence a sizeable decrease in shipments is necessarily accompanied by a similar decrease in new orders.

million). Shipments of nondurable goods increased \$105 million or 0.3 percent to \$35.23 billion. Among the nondurable goods, increases in chemicals (\$310 million) and petroleum and coal products (\$120 million) were partially offset by decreases in other sectors of nondurables.

UNFILLED ORDERS

Unfilled orders of durable goods increased \$1.05 billion or 1.0 percent to \$110.66 billion at the end of December. This increase was led by nonelectrical machinery (\$660 million) and fabricated metal products (\$295 million).

INVENTORIES

Inventories of durable goods increased \$1.46 billion and nondurable goods increased \$695 million between the end of December and November. At the all manufacturing level, materials and supplies increased \$915 million, work in process inventories increased \$720 million and finished goods increased \$520 million.

SCHEDULED RELEASE DATES

The figures on the durable goods industries in this report supersede those issued earlier in the advance report on durable goods. The present report is based on more complete reporting, but the estimates are also considered preliminary. Final figures will appear as historical data in the report to be published for next month. The advance report on durable goods for January is scheduled for release on February 22, 1974 and the full report is scheduled for release on March 5, 1974.

For an explanation of terms used in this report see appendix following table 5.

Inquiries concerning these figures should be addressed to the U.S. Department of Commerce, Social and Economic Statistics Administration, Bureau of the Census, Industry Division, Washington, D.C. 20233.

Table 1.--VALUE OF MANUFACTURERS' SHIPMENTS, INVENTORIES, AND ORDERS, BY INDUSTRY GROUP

(Millions of dollars)

Industry group	Shipments						Total inventories					
	Seasonally adjusted			Without seasonal adjustment ¹			Seasonally adjusted			Without seasonal adjustment ¹		
	Dec. 1973 ^b	Nov. 1973 ^r	Oct. 1973	Dec. 1973 ^b	Nov. 1973 ^r	Dec. 1972	Dec. 1973 ^b	Nov. 1973 ^r	Oct. 1973	Dec. 1973 ^b	Nov. 1973 ^r	Dec. 1972
All manufacturing industries:												
Total.....	75,548	77,019	75,269	71,739	76,387	63,675	120,591	118,435	117,224	120,037	117,842	107,415
Total, excluding transportation.....	66,454	66,395	64,460	63,050	65,176	54,541	102,606	100,672	99,458	102,115	99,958	91,253
Durable goods industries, total.	40,321	41,896	41,567	38,163	41,356	34,636	79,104	77,645	76,951	78,511	77,154	69,803
Stone, clay, and glass products.	2,183	2,162	2,178	1,927	2,136	1,736	2,791	2,737	2,720	2,730	2,626	2,410
Primary metals, total.....	6,693	6,792	6,730	6,081	6,383	5,051	9,314	9,226	9,222	9,459	9,255	9,828
Blast furnaces, steel mills.....	3,157	3,367	3,459	2,819	3,057	2,518	4,645	4,617	4,677	4,799	4,686	5,447
Nonferrous metals.....	2,620	2,495	2,369	2,416	2,428	1,806	3,139	3,402	3,375	3,435	3,395	3,351
All other primary metals.....	916	930	902	846	898	727	1,230	1,207	1,170	1,225	1,174	1,030
Fabricated metal products total.....	4,724	4,714	4,648	4,518	4,668	3,866	8,907	8,792	8,513	8,678	8,602	7,628
Metal cans, barrels, and drums.....	506	491	490	436	431	356	739	730	721	673	680	646
Machinery, except electrical, total.....	6,647	6,614	6,353	6,411	6,174	5,326	16,736	16,365	16,164	16,740	16,322	14,389
Engines and turbines.....	541	521	573	630	495	521	1,418	1,395	1,378	1,442	1,429	1,251
Farm machinery and equipment.	605	654	500	485	495	441	1,469	1,335	1,342	1,469	1,298	1,233
Construction, mining, and material handling equipment.	1,332	1,321	1,293	1,156	1,189	872	3,294	3,188	3,162	3,337	3,172	2,838
Metalworking machinery.....	356	381	353	369	356	309	1,423	1,426	1,385	1,410	1,429	1,143
General industrial machinery	626	573	575	622	542	481	1,421	1,397	1,375	1,406	1,379	1,230
Electrical machinery, total....	5,436	5,382	5,372	5,190	5,571	4,959	12,495	12,302	12,102	12,266	12,170	10,178
Electrical transmission and distribution equipment and industrial apparatus.....	1,037	1,022	998	1,029	1,028	923	2,772	2,716	2,651	2,760	2,681	2,253
Household appliances.....	746	680	687	690	655	593	1,164	1,177	1,172	1,149	1,154	1,023
Radio and TV.....	513	575	524	565	654	543	1,057	1,048	1,050	980	1,028	891
Communication equipment.....	1,185	1,125	1,139	1,258	1,150	1,173	3,530	3,492	3,430	3,488	3,471	2,856
Transportation equipment, total.....	9,094	10,624	10,809	8,689	10,911	9,134	17,985	17,763	17,766	17,922	17,884	16,162
Motor vehicles and parts.....	5,423	6,668	6,932	4,808	6,928	5,520	5,412	5,391	5,391	5,429	5,461	4,603
Aircraft, missiles, and parts.....	2,602	2,775	2,655	2,932	2,879	2,726	9,785	9,709	9,740	9,697	9,731	9,235
Shipbuilding and railroad equipment.....	357	428	405	395	433	394	1,940	1,832	1,829	1,917	1,883	1,615
Instruments and related products, total.....	1,216	1,232	1,245	1,209	1,258	1,175	3,281	3,170	3,083	3,178	3,110	2,637
Scientific and engineering.....	613	608	603	589	593	568	1,814	1,744	1,708	1,783	1,723	1,582
All other instruments and related products.....	603	624	642	620	665	607	1,467	1,426	1,375	1,395	1,387	1,055
All other durable goods industries.....	4,328	4,376	4,232	3,838	4,255	3,389	7,595	7,290	7,381	7,538	7,185	6,571
Nondurable goods industries, total.....	35,227	35,123	33,702	33,576	35,031	29,039	41,487	40,790	40,273	41,526	40,668	37,612
Food and kindred products, total.....	12,095	12,180	11,739	11,982	12,337	10,183	10,565	10,432	10,172	10,891	10,904	9,733
Meat products.....	2,900	2,923	2,723	2,865	2,882	2,565	1,188	1,163	1,116	1,199	1,177	873
Fats and oils.....	909	871	818	870	922	681	743	741	630	804	810	779
Tobacco products.....	553	528	536	540	532	489	2,460	2,446	2,425	2,591	2,449	2,495
Textile mill products.....	2,678	2,637	2,532	2,573	2,675	2,294	4,604	4,521	4,407	4,457	4,339	3,917
Paper and allied products, total.....	2,871	2,898	2,807	2,699	2,850	2,288	3,213	3,170	3,089	3,241	3,121	2,872
Pulp, paper, etc.....	1,199	1,240	1,201	1,148	1,216	956	1,118	1,094	1,047	1,115	1,082	1,036
Paperboard containers.....	772	777	749	711	766	608	932	931	914	918	927	827
All other paper containers..	900	881	857	840	868	724	1,193	1,145	1,128	1,208	1,112	1,009
Chemicals and allied products, total.....	6,205	5,895	5,687	5,521	5,610	4,740	7,226	7,208	7,185	7,243	7,092	7,064
Industrial chemicals, except pigments.....	1,741	1,731	1,634	1,600	1,651	1,400	1,986	1,976	1,992	2,028	1,980	2,026
Drugs, soap, and toiletries..	1,674	1,620	1,581	1,551	1,612	1,370	2,147	2,124	2,414	2,399	2,349	2,161
Petroleum and coal products..	3,577	3,456	3,170	3,605	3,425	2,685	2,653	2,548	2,174	2,699	2,617	2,340
Rubber and plastics products, n.e.c.....	1,809	1,794	1,748	1,636	1,729	1,490	2,613	2,574	2,578	2,627	2,559	2,394
All other nondurable goods industries.....	5,439	5,735	5,483	5,020	5,873	4,870	8,123	7,891	7,943	7,777	7,607	6,797

See footnotes at end of table.

Table 1.--VALUE OF MANUFACTURERS' SHIPMENTS, INVENTORIES, AND ORDERS, BY INDUSTRY GROUP--Continued

(Millions of dollars)

Industry group	New orders						Unfilled orders					
	Seasonally adjusted			Without seasonal adjustment ¹			Seasonally adjusted			Without seasonal adjustment ¹		
	Dec. 1973 ^P	Nov. 1973 ^R	Oct. 1973	Dec. 1973 ^P	Nov. 1973 ^R	Dec. 1972	Dec. 1973 ^P	Nov. 1973 ^R	Oct. 1973	Dec. 1973 ^P	Nov. 1973 ^R	Dec. 1972
All manufacturing industries:												
Total.....	76,660	79,441	77,758	73,420	78,917	65,814	115,436	114,324	111,897	114,279	112,600	85,314
Total, excluding transportation.....	67,526	67,868	66,390	64,763	67,037	56,064	84,012	82,939	81,460	82,976	81,266	59,300
Durable goods industries, total.	41,370	44,315	44,037	39,830	43,845	36,730	110,655	109,606	107,185	109,590	107,921	81,345
Primary metals, total.....	6,531	6,730	6,868	6,530	6,795	5,363	14,771	14,934	14,996	14,219	13,770	7,681
blast furnaces, steel mills.....	3,000	3,109	3,309	3,191	3,288	2,733	9,894	10,051	10,309	9,458	9,086	4,798
Nonferrous metals.....	2,511	2,582	2,516	2,392	2,488	1,872	2,707	2,816	2,730	2,623	2,647	1,805
Fabricated metal products.....	5,020	4,997	5,135	4,845	4,849	4,232	14,910	14,614	14,329	14,818	14,491	10,856
Machinery, except electrical, total.....	7,306	7,313	7,173	7,068	6,889	5,894	21,981	21,321	20,621	21,850	21,191	14,822
Engines and turbines.....	739	710	711	822	676	801	5,782	5,583	5,393	5,765	5,572	4,519
Construction, mining, and material handling equipment.....	1,491	1,558	1,505	1,278	1,397	954	4,444	4,285	4,050	4,364	4,242	2,722
Metalworking machinery.....	390	461	489	391	423	362	2,039	2,005	1,926	2,045	2,023	1,088
General industrial machinery.....	656	561	689	699	555	549	2,263	2,233	2,245	2,261	2,184	1,523
Electrical machinery, total...	5,516	5,788	5,816	5,736	5,748	5,206	19,786	19,706	19,300	19,909	19,665	15,864
Electrical transmission and distribution equipment and industrial apparatus.....	1,233	1,175	1,097	1,258	1,150	1,029	5,618	5,422	5,269	5,615	5,386	4,260
Household appliances.....	740	670	674	686	637	594	116	121	130	110	114	133
Radio and TV.....	381	653	530	468	629	564	629	761	683	601	698	671
Communication equipment.....	1,105	1,176	1,152	1,233	1,110	1,115	6,248	6,328	6,278	6,409	6,435	6,094
Transportation equipment, total.....	9,134	11,573	11,368	8,657	11,880	9,750	31,424	31,385	30,437	31,303	31,334	26,014
Aircraft, missiles, and parts.....	2,307	2,893	3,156	2,630	2,847	3,245	19,470	19,765	19,648	19,357	19,659	17,886
Shipbuilding and railroad equipment.....	543	1,221	462	542	1,228	389	7,426	7,241	6,448	7,315	7,169	5,016
All other durable goods industries.....	7,863	7,914	7,676	6,994	7,684	6,285	7,783	7,646	7,502	7,491	7,470	6,108
Nondurable goods industries, total.....	35,290	35,126	33,721	33,590	35,072	29,084	4,781	4,718	4,712	4,689	4,679	3,969
Industries with unfilled orders.....	8,564	8,687	8,465	8,224	8,840	7,454	4,781	4,718	4,712	4,689	4,679	3,969
Industries without unfilled orders.....	26,726	26,439	25,256	25,366	26,232	21,630	-	-	-	-	-	-

^a Represents zero. ^PPreliminary. ^RRevised.¹Adjusted for trading-day and calendar-month variations.

Table 2.--VALUE OF MANUFACTURERS' SHIPMENTS, INVENTORIES, AND ORDERS, FOR MARKET CATEGORIES AND SUPPLEMENTARY SERIES
(Millions of dollars)

Industry group	Seasonally adjusted			Without seasonal adjustment ¹			Seasonally adjusted			Without seasonal adjustment		
	Dec. 1973 ^p	Nov. 1973 ^r	Oct. 1973	Dec. 1973 ^p	Nov. 1973 ^r	Oct. 1972	Dec. 1973 ^p	Nov. 1973 ^r	Oct. 1973	Dec. 1973 ^p	Nov. 1973 ^r	Dec. 1972
Shipments						Total inventories						
All manufacturing industries, total.....	75,548	77,019	75,269	71,739	76,387	63,675	120,591	118,435	117,224	120,037	117,842	107,415
Durable goods industries, total.....	40,321	41,896	41,567	38,163	41,356	34,636	79,104	77,645	76,951	78,511	77,154	69,803
Nondurable goods industries, total.....	35,227	35,123	33,702	33,576	35,031	29,039	41,487	40,790	40,273	41,526	40,688	37,612
Industry groups arranged by market categories:												
Home goods and apparel.....	7,064	7,178	6,878	6,351	7,225	5,709	13,210	13,065	13,146	12,758	12,580	11,450
Consumer staples.....	14,797	14,915	14,479	14,592	15,104	12,748	16,065	15,808	15,638	16,376	16,110	14,704
Equipment and defense products, except automotive.....	10,560	10,690	10,222	10,690	10,392	9,318	31,122	30,582	30,302	30,990	30,507	27,242
Automotive equipment.....	6,648	7,980	8,306	5,811	8,120	6,458	7,074	7,038	7,021	7,087	7,062	6,090
Construction materials, supplies, and intermediate products.....	6,358	6,301	6,112	5,778	6,194	5,029	10,239	10,019	9,764	10,083	9,828	8,795
Other materials and supplies and intermediate products.....	30,121	29,955	29,272	28,517	29,352	24,413	42,881	41,923	41,353	42,743	41,755	39,134
Supplementary series: ²												
Household durable goods industries.....	3,197	3,260	3,152	3,040	3,292	2,690	6,239	6,112	6,210	6,060	5,955	5,406
Capital goods industries.....	12,240	12,320	12,096	12,523	12,255	10,965	35,059	34,541	34,200	34,878	34,502	30,619
Nondefense.....	10,646	10,713	10,386	10,776	10,603	9,251	29,452	29,033	28,669	29,302	28,962	25,604
Defense.....	1,594	1,607	1,710	1,747	1,652	1,714	5,607	5,508	5,531	5,576	5,540	5,015
New orders						Unfilled orders						
All manufacturing industries, total.....	76,660	79,441	77,758	73,420	78,917	65,814	115,436	114,324	111,897	114,279	112,600	85,314
Durable goods industries, total.....	41,370	44,315	44,037	39,830	43,845	36,730	110,655	109,606	107,185	109,590	107,921	81,345
Nondurable goods industries, total.....	35,290	35,126	33,721	33,590	35,072	29,084	4,781	4,718	4,712	4,689	4,679	3,969
Industry groups arranged by market categories:												
Home goods and apparel.....	6,988	7,274	6,948	6,222	7,220	5,629	2,909	2,978	2,885	2,803	2,928	2,339
Consumer staples.....	14,800	14,911	14,488	14,596	15,113	12,754						
Equipment and defense products, except automotive.....	11,158	12,253	11,203	11,457	11,607	10,200	56,381	55,636	54,035	56,304	55,414	44,359
Automotive equipment.....	6,797	8,018	8,307	5,934	8,326	6,560						
Construction materials, supplies, and intermediate products.....	6,734	6,558	6,630	6,060	6,315	5,322	13,958	13,581	13,232	13,727	13,445	10,091
Other materials and supplies and intermediate products.....	30,183	30,427	30,182	29,151	30,336	25,349	42,188	42,129	41,654	41,445	40,813	28,525
Supplementary series: ²												
Household durable goods industries.....	3,095	3,358	3,220	2,910	3,280	2,631	2,280	2,379	2,281	2,189	2,316	1,853
Capital goods industries.....	12,952	14,124	13,488	13,258	13,756	12,176	62,676	61,968	60,165	62,440	61,705	50,036
Nondefense.....	11,600	11,970	11,595	11,639	11,750	10,041	41,461	40,511	39,233	41,154	40,289	30,317
Defense.....	1,352	2,154	1,893	1,619	2,006	2,135	21,215	21,457	20,912	21,286	21,416	19,719

¹During 1968 manufacturers in ordnance, communications, aircraft and aircraft parts, and shipbuilding industries began to provide aggregate figures on shipments, orders, and total inventories of work performed for the Department of Defense. The results of these reports are included in the defense series. ^pPreliminary. ^rRevised. ²Shipments and new orders adjusted for trading-day and calendar-month variations; unfilled orders and inventories as of end of month. ³The supplementary series are regroupings of the separate industry categories as follows:

Household durable goods industries - Household furniture; kitchen articles and pottery; cutlery, handtools, and hardware; household appliances; ophthalmic goods, watches, and clocks; and miscellaneous personal goods.
 Capital goods industries - The capital goods industries series is comparable to the previous Producers' Capital Goods and the Defense Products (old series) categories.
 Nondefense products - Machinery, except electrical (excluding farm machinery and equipment and machine shops); electrical machinery (excluding household appliances and electronic components), and the nondefense portions of shipbuilding and repairing and railroad equipment, communication equipment, aircraft and aircraft parts, and ordnance.
 Defense products - Based on separate reports on defense work filed by large defense contractors in the following industries: ordnance, communications, aircraft and aircraft parts, and shipbuilding. The data are comparable to those published annually in the MA-175, Shipments of Defense-Oriented Industries, for the specified industries.

Table 3.--MANUFACTURERS' SHIPMENTS, INVENTORIES, AND ORDERS MONTH-TO-MONTH AND LONG TERM PERCENT CHANGES

(Based on seasonally adjusted data)

Item and industry group	Month-to-month			Average monthly rates of change				Average, 1967-72	
	Nov.-Dec. 1973	Oct.-Nov. 1973	Sept.-Oct. 1973	3 months			12 months	Average rise	Average decline
				Sept.-Dec. 1973	June-Sept. 1973	Mar.-June 1973	Dec. 1972-Dec. 1973		
Shipments:									
All manufacturing industries.....	-1.9	+2.3	+3.0	+1.1	+0.7	+0.9	+1.0	+1.3	-1.2
Durable goods industries, total.....	-3.8	+0.8	+3.5	+0.2	+0.8	+1.0	+0.8	+1.9	-1.6
Nondurable goods industries, total.....	+0.3	+4.2	+2.4	+2.3	+0.5	+0.7	+1.2	+0.9	-0.7
Total inventories:									
All manufacturing industries.....	+1.8	+1.0	+1.0	+1.3	+0.9	+0.9	+1.0	+0.5	-0.1
New orders:									
All manufacturing industries.....	-3.5	+2.2	+3.5	+0.7	-0.1	+1.2	+0.9	+1.8	-1.5
Durable goods industries, total.....	-6.6	+0.6	+4.2	-0.6	-0.6	+1.6	+0.7	+2.8	-2.4
Nondurable goods industries, total.....	+0.5	+4.2	+2.6	+2.4	+0.5	+0.6	+1.2	+1.0	-0.6
Unfilled orders:									
Durable goods industries, total.....	+1.0	+2.3	+2.4	+1.9	+2.4	+3.5	+2.6	+1.0	-1.1

Table 4.--VALUE OF MANUFACTURERS' INVENTORIES, BY STAGE OF FABRICATION, BY INDUSTRY GROUP

('Millions of dollars')

Industry group	Seasonally adjusted			Without seasonal adjustment			Seasonally adjusted			Without seasonal adjustment		
	Dec. 1972 ^p	Nov. 1973 ^r	Oct. 1973	Dec. 1972 ^p	Nov. 1973 ^r	Dec. 1972	Dec. 1972 ^p	Nov. 1973 ^r	Oct. 1973	Dec. 1972 ^p	Nov. 1973 ^r	Dec. 1972
	Total						Materials and supplies					
All manufacturing industries, total.....	120,591	118,435	117,224	120,037	117,842	107,415	40,229	39,312	38,836	40,636	39,286	34,320
Durable goods industries, total.....	79,104	77,645	76,951	78,511	77,154	69,803	24,107	23,444	23,064	24,253	23,441	20,162
Stone, clay, and glass products.....	2,791	2,737	2,720	2,730	2,626	2,410	997	968	936	1,001	962	809
Primary metals.....	9,314	9,226	9,222	9,459	9,255	9,828	3,601	3,494	3,376	3,776	3,593	3,456
Machinery (electrical and nonelectrical).....	29,231	28,667	28,266	29,006	28,492	24,567	8,398	8,076	7,932	8,402	7,975	6,514
Transportation equipment.....	17,985	17,763	17,766	17,922	17,884	16,162	3,583	3,594	3,624	3,634	3,665	3,075
All other durable goods industries.....	19,783	19,252	18,977	19,394	18,897	16,836	7,528	7,312	7,196	7,440	7,246	6,308
Nondurable goods industries, total.....	41,487	40,790	40,273	41,526	40,688	37,612	16,122	15,868	15,772	16,383	15,845	14,158
Chemicals and allied products.....	7,226	7,208	7,185	7,243	7,092	7,064	2,771	2,706	2,681	2,788	2,682	2,433
Petroleum and coal products.....	2,653	2,548	2,474	2,699	2,617	2,340	577	567	542	587	567	512
Rubber and plastics products, n.e.c.....	2,613	2,574	2,578	2,627	2,559	2,394	974	939	919	976	956	716
All other nondurable goods industries....	28,995	28,460	28,036	28,957	28,420	25,814	11,800	11,656	11,630	12,032	11,640	10,497
Work in process												
All manufacturing industries, total.....	42,655	41,935	41,405	42,121	41,897	37,655	37,707	37,188	36,983	37,280	36,659	35,440
Durable goods industries, total.....	36,039	35,519	35,082	35,659	35,529	31,812	18,958	18,682	18,805	18,599	18,184	17,829
Stone, clay, and glass products.....	406	394	389	383	363	314	1,388	1,375	1,395	1,346	1,301	1,287
Primary metals.....	3,413	3,405	3,455	3,402	3,395	3,491	2,300	2,327	2,391	2,281	2,267	2,881
Machinery (electrical and nonelectrical).....	13,276	13,203	12,983	13,157	13,245	11,146	7,557	7,388	7,351	7,447	7,272	6,907
Transportation equipment.....	12,823	12,589	12,576	12,746	12,639	11,757	1,579	1,580	1,566	1,542	1,580	1,330
All other durable goods industries.....	6,121	5,928	5,679	5,971	5,887	5,104	6,134	6,012	6,102	5,983	5,764	5,424
Nondurable goods industries, total.....	6,616	6,416	6,323	6,462	6,368	5,843	18,749	18,506	18,178	18,681	18,475	17,611
Chemicals and allied products.....	1,056	1,119	1,126	1,063	1,107	1,068	3,399	3,383	3,378	3,392	3,303	3,563
Petroleum and coal products.....	649	591	536	640	592	471	1,427	1,390	1,396	1,472	1,457	1,357
Rubber and plastics products, n.e.c.....	438	416	421	445	415	405	1,201	1,219	1,238	1,206	1,188	1,273
All other nondurable goods industries....	4,473	4,290	4,240	4,314	4,253	3,899	12,722	12,514	12,166	12,611	12,527	11,418

^pPreliminary.^rRevised.

Table 5.--RATIO OF MANUFACTURERS' INVENTORIES TO SHIPMENTS AND UNFILLED ORDERS TO SHIPMENTS, BY INDUSTRY GROUP
(Based on seasonally adjusted data)

Industry group	Inventories - shipments ratio				Unfilled orders - shipments ratio ¹ (months' backlog)			
	Dec. 1973 ^P	Nov. 1973 ^R	Oct. 1973	Dec. 1972	Dec. 1973 ^P	Nov. 1973 ^R	Oct. 1973	Dec. 1972
All manufacturing industries, total.....	1.60	1.54	1.56	1.61	2.67	2.53	2.52	2.18
Durable goods industries, total.....	1.96	1.85	1.85	1.92	3.19	3.00	2.97	2.59
Stone, clay, and glass products.....	1.28	1.27	1.25	1.25	(NA)	(NA)	(NA)	(NA)
Primary metals.....	1.39	1.36	1.37	1.73	2.21	2.20	2.23	1.43
Fabricated metals.....	1.89	1.87	1.83	1.94	3.54	3.46	3.45	3.01
Machinery, except electrical.....	2.52	2.47	2.54	2.60	3.31	3.22	3.25	2.70
Electrical machinery.....	2.30	2.29	2.25	2.12	3.64	3.66	3.59	3.21
Transportation equipment.....	1.98	1.67	1.64	1.68	5.81	5.28	5.09	4.95
Instruments and related products.....	2.70	2.57	2.48	2.30	(NA)	(NA)	(NA)	(NA)
Nondurable goods industries, total.....	1.18	1.16	1.19	1.23	0.56	0.54	0.56	0.52
Food and kindred products.....	0.87	0.86	0.87	0.92	(X)	(X)	(X)	(X)
Tobacco products.....	4.45	4.63	4.52	4.73	(X)	(X)	(X)	(X)
Textile mill products.....	1.72	1.71	1.74	1.70	(NA)	(NA)	(NA)	(NA)
Paper and allied products.....	1.13	1.09	1.10	1.18	(NA)	(NA)	(NA)	(NA)
Chemicals and allied products.....	1.17	1.22	1.26	1.32	(X)	(X)	(X)	(X)
Petroleum and coal products.....	0.74	0.74	0.78	0.86	(X)	(X)	(X)	(X)
Rubber and plastics products, n.e.c.....	1.44	1.43	1.47	1.45	(X)	(X)	(X)	(X)

NA Not available. P Preliminary. R Revised. X Not applicable.

¹Excludes the following industries with no unfilled order: Wooden containers; glass containers; metal cans, barrels and drums; motor vehicle assembly operations; foods and related products; tobacco; apparel and related products; chemicals; petroleum and coal products; and rubber and plastics products, n.e.c.

Appendix

The following is a description of the survey and definitions used. These are provided to clarify the meaning of the items involved and do not represent any revisions from those definitions previously employed.

DESCRIPTION OF THE SURVEY

The Manufacturers' Shipments, Inventories, and Orders survey provides monthly figures that are comparable to the annual totals published each year in the annual survey of manufactures (ASM). The ASM is based on a sample of approximately 60,000 manufacturing establishments drawn from the 5-year census universe of about 310,000 establishments. In the ASM, each manufacturing establishment provides data on employment, payrolls, shipments, cost of materials, capital expenditures, and inventories as well as other selected items. The establishments do not provide information on unfilled orders or new orders. Since the ASM is establishment based, it provides data for each of the 425 manufacturing industries in the Standard Industrial Classification System (SIC) and area data for industry groups.

The monthly survey M3-1 does not provide information at the complete SIC industry detail because of the smaller size of the reporting panel and the fact that most companies cannot provide shipments, inventories, and orders data monthly for individual establishments.

The monthly reporting panel consists of approximately 5,000 reporting units and includes virtually all companies with 1,000 or more employees and a sample of the smaller ones. The reporting unit typically comprises the entire operations of a company although many of the larger diversified companies file separate divisional type reports for their operations in different industries.

Most of the reporting units include mixed industry activity even within the broad industry categories of the monthly survey. The survey methodology assumes that the month-to-month changes of the reporting units classified in each industry category represent effectively the month-to-month movements of the establishments in the SIC industries which make up the category. Thus, the monthly reports are used to update the ASM estimates by using a link relative of matched companies in each industry.

EXPLANATION OF TERMS

Value of Shipments--Shipments in the monthly survey are equivalent to value of shipments as reported in the ASM which are received or receivable net selling values, f.o.b. plant, after discounts and allowances and excluding freight charges and excise taxes. Included in shipments are the value of all products sold, transferred to other plants of the same company, or shipped on consignment.

Shipments also include receipts of establishments in the industry for contract work performed for others, resales, receipts for miscellaneous activities such as the sale of scrap and refuse; value of installation and repair work performed by employees of the plant; and value of research and development performed at the plant. In the aircraft industry and shipbuilding, the value of work done in a given year varies considerably from the value of shipments because of the long lead time between the input of the materials and labor and the shipments of the completed aircraft or ship. In the annual survey, therefore, the value of work done during the year is requested rather than the value of shipments.

The value of shipments figures developed from the ASM contain duplication at the all manufacturing and industry group levels since the products of some industries are used as materials by other industries within the industry group. With the exception of motor vehicles, it is not significant at the 4-digit SIC group level. Since the M3-1 industry categories typically are groupings of industries, this duplication is significant for the all manufacturing, durable goods and nondurable goods categories and the various market groups. The significance of the duplication within the specific M3-1 industry groups varies depending on the 4-digit industry composition of these groups. It is most pronounced in a few highly integrated industry areas such as primary metals and motor vehicles and parts.

Since most monthly reports are for the entire company or major divisions rather than establishments, the companies are requested to report net sales, i.e., total company billings after discounts and allowances. Companies which file divisional reports are requested to treat transfers from one division of the company to another as if they were net sales to outside customers. Although this



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definition of shipments in the monthly reports differs from that used in the annual establishment reports, it is assumed that the month-to-month changes in company sales in the industry are representative of the month-to-month shipments of the establishments in the industry.

Inventories-- End-of-month inventories in the monthly survey are identical in definition to the end-of-year inventories in the ASM. In the ASM, respondents are asked to report inventories of individual establishments at approximate current cost if feasible; otherwise, "at book values." Since different methods of inventory valuation are used (LIFO, FIFO, etc.), the definition of the aggregate inventories for establishments in an industry is not precise. The figures on the change in inventories from one period to the next are of greater significance than the actual aggregates.

Inventories are reported by stage of fabrication: (a) finished goods; (b) work in process; and (c) materials, supplies, fuel, and other inventories. In using inventories by stage of fabrication at the all manufacturing and 2-digit industry levels as well as for the durable and nondurable goods sectors, it should be noted that a finished product of one industry may be a raw material for another industry at the next stage of fabrication. Insofar as the durable and nondurable goods sectors and also the 2-digit industry groups contain industries with successive stages of processing, the same type of commodity may be included under different inventory categories in the aggregate statistics.

New Orders Received and Unfilled Orders--

Orders as reported in the monthly survey are net of cancellations during the month. They include orders received during the period and also filled during the period as well as those orders received for future delivery. They also include the net sales value of contract change documents which increase or decrease the sales value of the unfilled orders to which they relate. Orders include only those supported by binding legal documents such as signed contracts, or letter contracts. In case of letter contracts the full amount of the sales value is included if the parties are in substantial agreement on the amount; otherwise, only the funds specifically authorized to be expended are included. The respondent is instructed to deduct the sales value of partial or complete cancellation of existing orders.

Unfilled orders include orders as defined above that have not yet passed through the sales account. Generally, unfilled orders at the end of the reporting period are equal to unfilled orders at the beginning of the period plus net new orders received less net sales.

While both new orders and unfilled orders are used in reviewing individual company reports for consistency, only unfilled orders are estimated directly in the tabulated totals. New orders are derived from the shipments plus net change in unfilled orders for each industry category. This procedure is followed for seasonally adjusted data as well as for the unadjusted data. Shipments and unfilled orders are seasonally adjusted independently. Seasonally adjusted new orders are derived from seasonally adjusted shipments and seasonally adjusted unfilled orders.

